

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/050657

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H03F1/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H03F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 235 344 A (NOKIA CORP) 28 August 2002 (2002-08-28) paragraph '0013! - paragraph '0015!; figure 2	1-10
A	US 2003/031271 A1 (BOZEKI JOHN JANOS ET AL) 13 February 2003 (2003-02-13) cited in the application paragraph '0013! - paragraph '0027!; figure 1	1-10
A	WO 01/63792 A (MOTOROLA ISRAEL LTD ; ROZENTAL MARK (IL); BEN AYUN MOSHE (IL)) 30 August 2001 (2001-08-30) page 6, line 1 - page 7, line 30; figures 1,2	1-10

-/-

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

25 August 2004

Date of mailing of the international search report

01/09/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Dietsche, S

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/050657

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 959 499 A (KHAN ANDREW MERRITT ET AL) 28 September 1999 (1999-09-28) column 1, line 66 - column 5, line 17; figure 1	1-10
A	US 5 675 286 A (GAILUS PAUL H ET AL) 7 October 1997 (1997-10-07) column 3, line 1 - column 5, line 49; figure 2	1-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/050657

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1235344	A	28-08-2002	EP 1235344 A2	28-08-2002
			US 2002115417 A1	22-08-2002
US 2003031271	A1	13-02-2003	WO 03015365 A1	20-02-2003
WO 0163792	A	30-08-2001	GB 2359680 A	29-08-2001
			AU 3765501 A	03-09-2001
			EP 1260024 A2	27-11-2002
			WO 0163792 A2	30-08-2001
			US 2003119462 A1	26-06-2003
US 5959499	A	28-09-1999	FR 2769152 A1	02-04-1999
			WO 9917439 A1	08-04-1999
US 5675286	A	07-10-1997	NONE	